

To the Co-chairs of the Legislative Council:

In accordance with the Arkansas Code Annotated 12-77-107 the Arkansas Department of Emergency Management (ADEM) hereby reports the following activities of the Arkansas Earthquake Program as they relate to specific requirements of the bill:

A. Continued assessment from proper scientific authorities of the seismic risk to the State:

In 2013 ADEM maintained its relationship with the Arkansas Geological Survey (AGS), Arkansas Archeological Survey (AAS), and State Fire Marshall, through meetings, email, and phone correspondence.

- ADEM met with AGS to address the development of Arkansas specific Earthquake Curriculum for schools
- ADEM, on behalf of Arkansas Governor's Earthquake Advisory Council (ARGEAC), invited AAS to the summer ARGEAC Meeting to present artifacts discovered during New Madrid Earthquake Sand-Blow exploration
- State Fire Marshall attended the summer ARGEAC Meeting and presented updates to the *2012 Arkansas Fire Prevention Code Rules* as found in the *2012 International Fire, Building, and Residential Code*. Updates addressed seismic provisions

B. Training and education of state and local government officials, employees, and citizens of Arkansas regarding preparation and protective measures that can be taken before, during, and after an earthquake:

- February 8, 2013 – FEMA E-74 Non-Structural Mitigation Class
- July 24, 2013 – ATC 20 Class, Russellville, AR; Training for post-disaster structural engineers
- September 20, 2013 – ATC 20 Class, Little Rock, AR; Training for post-disaster structural engineers
- October 25, 2013 – ATC 20 Class, Fayetteville, AR; Training for post-disaster structural engineers

C. Planning coordination, guidance, and assistance to all state and local government officials in preparation for, response to, and recovery from earthquakes:

Joint Operations Plan Revision

A detailed revision of the ADEM/FEMA Joint Operations Catastrophic Earthquake plan was conducted during 2013. ADEM invited Emergency Support Function (ESF) Agencies (and supporting agencies) to a series of planning meetings. The updates included information gathered from ESF meetings and lessons learned from National Level Exercise 2011 (NLE11).

Arkansas Aviation Operations Plan Revision

In addition to the Joint Operations Plan revisions, ADEM's Technical Planner conducted a full review and revision of the Arkansas Aviation Operations Plan. To gain situational awareness immediately following a catastrophic earthquake, the response community will rely on aviation reconnaissance. The revision process included a series of meetings with associated aviation

partners throughout the state to ensure a common operating picture and standard operating procedures during emergency air operations.

Additional Activities

- November 20, 2012 – ADEM hosted an airport assessment of Walnut Ridge Airport conducted by FEMA

D. Coordination of earthquake program activities with comparable agencies of the federal government and other states:

Capstone 14 Exercise

Capstone 2014 Exercise will be conducted in direct support of Presidential Policy Directive -8 and the National Preparedness Goal. Participants in this exercise are: the Central United States Earthquake Consortium (CUSEC), the associate (surrounding) CUSEC states, the four FEMA regions, and interested federal agencies. Specifically, this effort will advance mitigation activities; preparedness and response plans; and assess critical infrastructure inventories across the region and our partner states. In addition, Capstone 14 will develop new and stronger multi-state groups to accomplish these goals.

MASS/MRP

ADEM is teaming with other CUSEC states to introduce MASS (Mutual Aid Support System) for tracking Mission Ready Packaging (MRP). MASS was developed by Kentucky Emergency Management (KYEM) to track MRPs specific to response and recovery operations. MRPs are organized, developed, trained, and exercised prior to an emergency or disaster. They are developed by resource owners/providers and coordinated through state emergency management agency's (EMA). MASS will provide state EMAs with real-time tracking of resource inventory and efforts within their state; as well as, other states utilizing the system. The system is slated to be tested during the Capstone 14 exercise in June 2014.

ShakeOut

The Arkansas Earthquake Program has moved the ShakeOut Earthquake Drill from February to October to align with the majority of the nation. The drills are an annual opportunity for people in homes, schools, and organizations to practice what to do during earthquakes, and to improve preparedness. Historically, Arkansas participated in February during Earthquake Awareness Week; however, with the move to October the state will benefit from national level exposure during advertising and outreach campaigns.

- February 7, 2013 at 10:15am, 100,818 Arkansans participated in the Great Central US ShakeOut
- October 17, 2013 at 10:17am, 91,932 Arkansans participated in the Great US ShakeOut
 - 66,588 students in K-12 Schools
 - 16,592 students from Arkansas Colleges and Universities
 - 2,806 state employees

ARGEAC

In 2013 the Arkansas Governor's Earthquake Advisory Council met for their biannual meetings:

- January 24, 2013 in Jonesboro, AR:
 - Brigitte Williams with Arkansas Red Cross provided a tutorial for their new Earthquake application for smartphones
 - Robert Lorimer with State Farm Insurance discussed trends in Earthquake insurance throughout the state and the U.S.
 - University of Memphis Center for Earthquake Research and Information (CERI) new video was shown, *New Madrid: The Earthquakes of 1811 - 1812*
- July 18, 2013 in Jacksonville, AR
 - Andy Traffanstedt with Arkansas Task Force One provided a tour of their response and recovery vehicle to include Earthquake search and rescue, tools and equipment
 - Ted Pruess with Missouri Structural Assessment and Visual Evaluation Coalition (SAVE) presented on how they respond to not only earthquakes, but other disasters in the state

Interstate Emergency Response Support Plan (IERSP)

The Emergency Response Support Plan is an agreement between the 5 FEMA Region 6 States to enable the States to better focus on catastrophic disasters for each State to utilize the EMAC to move pre-identified resources to the affected State. For Arkansas, an earthquake is the scenario for a catastrophic disaster. We are identifying resource gaps and working with the other R6 states to have existing arrangements in place to fill those gaps.

ADEM's October State Emergency Operations Center (SEOC) Exercise included staff from the Oklahoma Department of Emergency Management (OEM). OEM personnel observed ADEM staff in a normal exercise, shadowing 11 key positions within the SEOC. During the exercise, ADEM and OEM simulated a shift-change and Oklahoma assumed limited control of ADEM's SEOC. This exercise and training opportunity assisted both states in the event OEM is requested to support ADEM SEOC operations during prolonged response and recovery missions.

Additional Coordination Activities

- December 10, 2012 – Earthquake Program Manager (EQPM) attended fall Central US Earthquake Consortium (CUSEC) Program Manager's Conference in Louisville, KY
- April 15, 2013 – ADEM participated in Vigilant Guard exercise with the Arkansas National Guard relating to catastrophic Earthquake response
- April 29, 2013 – EQPM and ADEM's Deputy Public Information Officer (PIO) attended National Earthquake Program Managers Meeting in Seattle, WA
- July 9, 2013 – EQPM participated in IZARD Co. table top exercise pertaining earthquake based sheltering and evacuation
- July 22, 2013 – EQPM attended E910 Earthquake Class with ADEM's new Emergency Management Assistance Compact (EMAC) Coordinator regarding large multi-agency earthquake response
- 2013 – Coordinated with CUSEC and member states on Capstone 14 project through conference calls and meetings:
 - Multistate Conference Calls:
 - April 8, 2013
 - May 6, 2013

- June 17, 2013
- July 22, 2013
- August 26, 2013
- September 23, 2013
- October 14, 2013
- Meetings:
 - Capstone Concepts & Operations February 12, 2013
 - Capstone Mission Ready Packaging March 6, 2013
 - Capstone Initial Planning Conference June 3, 2013
- 2013 – EQPM and ADEM’s Public Relation Office worked with CUSEC and ShakeOut to participate in a national level ShakeOut Exercise in October 2013
- 2013 – EQPM participated in monthly CUSEC conference calls

E. The dissemination of information to the public pertaining to earthquake hazards, especially to Arkansans living near the New Madrid Fault, protective measures, seismic resistance in building construction, and appropriate actions to be taken before, during, and after an earthquake, and other matters the Arkansas Department of Emergency Management shall determine to be necessary or appropriate to educate, inform, and equip citizens in this state to deal with any earthquake:

- November 27, 2012 – EQPM presented at the Arkansas State University (ASU) Center for Science, Technology, Engineering, and Math
- February 7, 2013 – ADEM’s Earthquake Program facilitated and participated in Great Central U.S. ShakeOut
- February 7, 2013 – EQPM attended Lonoke Co. earthquake exercise and provided media presence for Little Rock news networks
- March 4, 2013 – EQPM and ADEM’s Deputy PIO presented at the Lee Co. Rotary about earthquake non-structural mitigation for small businesses
- April 26, 2013 – EQPM presented at Piggott, AR High School career day concerning earthquake hazard and preparedness
- June 19, 2013 – EQPM provided earthquake presentation to Clay Co. Local Emergency Planning Committee (LEPC)
- July 15, 2013 – EQPM provided earthquake Presentation to the inaugural ASU Disaster Camp for 7th and 8th graders in NE Arkansas. ADEM Deputy Director was on hand to award students with their course certificates
- 2013 – EQPM updated the Arkansas Department of Emergency Management Earthquake webpage to include the introduction of an Earthquake Training Page
- 2013 – EQPM provided periodic updates to the Arkansas Governor’s Earthquake Advisory Council webpage to include the addition of an Events and Earthquake News pages

- F. Recommendation for Improvement: Due in large part to the efforts put forward by the administrators of this earthquake program, in conjunction with the Central United States Earthquake Consortium and the Federal Emergency Management Agency, many Arkansas citizens have become aware of the potential threat posed by the New Madrid Fault system to the north eastern portion of the state. However, there is still room for improvement in the area of general citizen awareness of the earthquake risk as it pertains to the entire state. It is therefore recommended that a continued emphasis be placed on citizen education through initiatives and programs aimed at primary and secondary schools and the general public.
- November 4, 2013 – ADEM will host Resource Allocation/ Mutual-Aid Support System Workshop (RAWII) for Capstone 14
 - 2014 and on – Grow ShakeOut participation numbers throughout Arkansas. ADEM anticipates growing this drill through partnerships with state agencies, K-12 schools (both public and private), and universities.
 - With the assistance of Arkansas Department of Education, disseminate earthquake preparedness information throughout schools. Campaigns have proven that information reaches parents through the students.